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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/657,237

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James Thomas Edward McDonnell

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EXAMINER

NGUYEN, KHAI MINH

ART UNIT

PAPER NUMBER

2617

NOTIFICATION DATE

DELIVERY MODE

07/20/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/657,237	Applicant(s) MCDONNELL ET AL.	
	Examiner KHAI M. NGUYEN	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 April 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-20 and 22-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-20 and 22-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/29/2009 has been entered.

Claims 1, 10, 14 and 15 amended.

Haartsen in view of Kimura clearly disclose:

receiving an indication of potential use the wireless hotspot from a user of the communications device (see Kimura, [0017] establishing data link connection with a mobile station within the area of a radio LAN (hotspot)... and an authentication request from mobile station to hotspot)

sending a request over a cellular communications network to the cellular communications service provider for verifying the trustworthiness of the provider (see Haartsen, col.7, lines 29-33 (fig.3a, an authentication request (RESP-L) from mobile station to cell station)) of the wireless computer network service (col.8, lines 15-20 (mobile station permit to access to item 110)); and

on successful verification of the provider of the wireless computer network service (see Haartsen, col.8, lines 15-20 (mobile station permit to access to item 110)), receiving a confirmation over the cellular communications network (see Haartsen, items

124a-b and 126a-b) that the provider of the wireless computer network service is authenticated by the cellular communications service provider (see Haartsen, fig.3-4, col.7, line 62 to col.8, line 20).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4, 9-11, 14, 18-19, and 22 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haartsen (U.S.Pat-5598459), in view of Kimura, Shinya (EP 1161031A2).

Regarding claim 1, Haartsen teaches a method for operating a communications device capable of communicating with a cellular communications service provider and a wireless computer network service provider, wherein the cellular communications service provider authenticates provider of the wireless computer network service running at a wireless hotspot, the method comprising:

sending a request over a cellular communications network to the cellular communications service provider for verifying the trustworthiness of the provider (col.7, lines 29-33 (fig.3a, an authentication request (RESP-L) from mobile station to cell station)) of the wireless computer network service (col.8, lines 15-20 (mobile station permit to access to item 110)); and

on successful verification of the provider of the wireless computer network

service (col.8, lines 15-20 (mobile station permit to access to item 110)), receiving a confirmation over the cellular communications network (items 124a-b and 126a-b) that the provider of the wireless computer network service is authenticated by the cellular communications service provider (fig.3-4, col.7, line 62 to col.8, line 20).

Haartsen fails to specifically disclose receiving an indication of potential use the wireless hotspot from a user of the communications device.

However, Kimura teaches receiving an indication of potential use the wireless hotspot from a user of the communications device ([0017] establishing data link connection with a mobile station within the area of a radio LAN (hotspot)... and an authentication request from mobile station to hotspot).

Therefore, it would have been obvious to one having ordinary skill in the art at the time invention was made to apply the teaching of Kimura to Haartsen to provide a system for authorizing or rejecting instruction with respect to the authentication requesting mobile station.

Regarding claim 3, Haartsen, and Kimura further teach a method as claimed in claim 1, wherein the wireless computer network service is a service running over infrastructure of the wireless hotspot (see Kimura, access point 18) and the provider of the wireless computer network service is not the provider of the wireless hotspot (see Haartsen, fig.3-4, col.7, line 62 to col.8, line 20 (item 110)).

Regarding claim 4, Haartsen, and Kimura further teach a method as claimed in claim 1, wherein the confirmation comprises a key enabling the communications device

to use the wireless computer network service provided by the wireless computer network provider (see Haartsen, fig.3-4, col.7, line 62 to col.8, line 20 (item 110)).

Regarding claim 9, Haartsen, and Kimura further teach a method as claimed in claim 1, wherein the indication of potential use is a positive request from the user (see Kimura, [0043]).

Regarding claim 10, Haartsen teaches a computer system for a cellular telecommunications provider, comprising a processor arranged for:

the communications device (fig.1, item 120) configured to communicate with the cellular telecommunications provider (item 102) and at least one wireless computer network (item 110);

receiving a request for authentication of at least one provider of the computer network services at the specified wireless hotspot (item 110) from the communications device provider (col.7, lines 29-33 (fig.3a, an authentication request (RESP-L) from mobile station to cell station), and col.8, lines 15-20 (mobile station permit to access to item 110));

identifying wireless computer network services available at the specified wireless hotspot (col.7, lines 29-33 (fig.3a, an authentication request (RESP-L) from mobile station to cell station), and col.7, line 62 to col.8, line 20 (the base station can then decide if the mobile terminal can access the base station if the response match....mobile station permit to access to item 110));

authenticating the at least one provider of the wireless computer network services available at the specified wireless hotspot responsive to the request from the communications device (col.7, lines 29-33 (fig.3a, an authentication request (RESP-L) from mobile station to cell station), and col.7, line 62 to col.8, line 20 (the base station can then decide if the mobile terminal can access the base station if the response match....mobile station permit to access to item 110)); and

preparing authentication information for use by the communications device in communicating (col.6, lines 4-13) with the at least one wireless computer network (col.7, lines 29-33 (fig.3a, an authentication request (RESP-L) from mobile station to cell station), and col.7, line 62 to col.8, line 20 (the base station can then decide if the mobile terminal can access the base station if the response match....mobile station permit to access to item 110)).

Haartsen fails to specifically disclose receiving an indication of potential use of a specified wireless hotspot of computer network services from a user of a communications device.

However, Kimura teaches receiving an indication of potential use of a specified wireless hotspot of computer network services from a user of a communications device ([0017] establishing data link connection with a mobile station within the area of a radio LAN (hotspot)... and an authentication request from mobile station to hotspot).

Therefore, it would have been obvious to one having ordinary skill in the art at the time invention was made to apply the teaching of Kimura to Haartsen to provide a

system for authorizing or rejecting instruction with respect to the authentication requesting mobile station.

Regarding claim 11, Haartsen and Kimura further teach a computer system as claimed in claim 10, wherein in preparing the authentication information the processor is arranged for generating a cryptographic key (see Haartsen, col.5, line 60 to col.6, line 13).

Regarding claim 18, Haartsen and Kimura further teach a computer system as claimed in claim 10, wherein in authenticating the at least one provider of the wireless computer network services the processor is arranged for verifying the trustworthiness of the at least one provider of the wireless computer network services (see Haartsen, fig.3-4, col.7, line 62 to col.8, line 20 (item 110), see Kimura, [0017] and [0038]).

Regarding claim 14, Haartsen teaches a storage medium storing a computer-readable program code thereon, the computer-readable program code being arranged to cause a computer system of a cellular communications provider to:

the communications device (fig.1, item 120) being capable of communicating with the cellular telecommunications provider (item 102) and at least one wireless computer network service provider (item 110);

receive a request from the communications device for authentication of at least one provider of the computer network services at the specified wireless hotspot (col.7,

lines 29-33 (fig.3a, an authentication request (RESP-L) from mobile station to cell station), and col.8, lines 15-20 (mobile station permit to access to item 110));

identify wireless computer network services available at the specified wireless hotspot (col.7, lines 29-33 (fig.3a, an authentication request (RESP-L) from mobile station to cell station), and col.8, line 62 to col.8, line 20 (the base station can then decide if the mobile terminal can access the base station if the response match....mobile station permit to access to item 110));

authenticate the at least one provider of the wireless computer network services available at the specified wireless hotspot responsive to the request from the communications device (col.7, lines 29-33 (fig.3a, an authentication request (RESP-L) from mobile station to cell station), and col.7, line 62 to col.8, line 20 (the base station can then decide if the mobile terminal can access the base station if the response match....mobile station permit to access to item 110)); and

prepare authentication information for provision to the communications device (col.7, lines 29-33 (fig.3a, an authentication request (RESP-L) from mobile station to cell station), and col.7, line 62 to col.8, line 20 (the base station can then decide if the mobile terminal can access the base station if the response match....mobile station permit to access to item 110)).

Haartsen fails to specifically disclose receive an indication of potential use of a specified wireless hotspot of wireless computer network services from a user of a communications device.

However, Kimura teaches receive an indication of potential use of a specified wireless hotspot of wireless computer network services from a user of a communications device ([0017] establishing data link connection with a mobile station within the area of a radio LAN (hotspot)... and an authentication request from mobile station to hotspot).

Therefore, it would have been obvious to one having ordinary skill in the art at the time invention was made to apply the teaching of Kimura to Haartsen to provide a system for authorizing or rejecting instruction with respect to the authentication requesting mobile station.

Regarding claim 19 is rejected same reasons of the set forth in claim 18.

Regarding claim 22, Haartsen and Kimura further teach a method as claimed in claim 1, wherein the confirmation that the provider of the service is authenticated is provided via a cellular communication link between the cellular communications service provider and the communication device (see Haartsen, col.5, line 60 to col.6, line 13).

Regarding claim 24, Haartsen and Kimura further teach a computer system as claimed in claim 10, wherein the computer system is further arranged to provide the authentication information to the communications device of the user via a cellular communication link between the cellular telecommunications provider and the communications device (see Haartsen, col.5, line 60 to col.6, line 13).

4. Claims 15-17, 20 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haartsen (U.S.Pat-5598459) in view of Stewart et al. (U.S.Pub-20060183467).

Regarding claim 15, Haartsen teaches a method for operating a cellular telecommunications provider, wherein the cellular telecommunications provider authorises authorizes a user to use a location-dependent wireless computer network service, the method comprising:

tracking the location of the user via a wireless communications device of the user (col.3, lines 28-29 (detecting the cellular terminal is within a local region (detect location of cellular terminal)));

authenticating a provider of the location-dependent wireless computer network service (col.7, lines 29-33 (fig.3a, an authentication request (RESP-L) from mobile station to cell station), and col.7, line 62 to col.8, line 20 (the base station can then decide if the mobile terminal can access the base station if the response match....mobile station permit to access to item 110)); and

providing the authenticated provider of the location-dependent wireless computer network service to the user (col.7, lines 29-33 (fig.3a, an authentication request (RESP-L) from mobile station to cell station), and col.7, line 62 to col.8, line 20 (the base station can then decide if the mobile terminal can access the base station if the response match....mobile station permit to access to item 110)).

Haartsen fails to specifically disclose determining that the user is within the vicinity of and outside of an operating range of the location-dependent wireless computer network service.

However, Stewart teaches determining that the user is within the vicinity of and outside of an operating range of the location-dependent wireless computer network service ([0015]).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of Stewart to Haartsen to provide a system which can automatically locate a user with greater precision than is currently available.

Regarding claim 16, Haartsen and Stewart further teach a method as claimed in claim 15, further comprising receiving a request to use the location-dependent wireless computer network service by the user (see Kimura, [0017] and [0032]).

Regarding claim 17, Haartsen and Stewart further teach a method as claimed in claim 16, wherein authenticating the provider of the wireless computer network service commences prior to receiving the request (see Kimura, [0038]).

Regarding claim 20, Haartsen and Stewart further teach a method as claimed in claim 15, wherein authenticating the provider of the wireless computer network service comprises verifying the trustworthiness of the provider of the services (see Haartsen, col.5, line 60 to col.6, line 13, see Kimura, [0017] and [0032]).

Regarding claim 26, Haartsen and Stewart a method as claimed in claim 15, further comprising:

providing to the user additional wireless computer network services in the vicinity of the location of the user (see Stewart, [0015]).

5. Claims 5-8, 12-13, 23 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haartsen (U.S.Pat-5598459), in view of Kimura, Shinya (EP 1161031A2), and further in view of Stewart et al. (U.S.Pub-20060183467).

Regarding claim 5, Haartsen and Kimura further teach a method as claimed in claim 1, further comprising, information of the wireless computer network service to the cellular communications service provider (see Haartsen, fig.3-4, col.7, line 62 to col.8, line 20 (item 110)).

Haartsen and Kimura fail to specifically disclose sending location information representing the location of the communications device.

However, Stewart teaches sending location information representing the location of the communications device ([0015]).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of Stewart to Haartsen and Kimura, to provide a system in which a mobile user can be geographically located automatically.

Regarding claim 6, Haartsen, Kimura, and Stewart further teach a method as claimed in claim 5,

Haartsen and Kimura fail to specifically disclose including information concerning the location of one or more hotspots close to the user (see Stewart, [0014]-[0015], [0023]).

Regarding claim 7, Haartsen, Kimura, and Stewart further teach a method as claimed in claim 5, wherein the indication of potential use is determination that the hotspot is within present or future range of the user (see Stewart, [0014]-[0015]).

Regarding claim 8, Haartsen, Kimura, and Stewart further teach a method as claimed in claim 7, wherein authentication of the wireless computer network provider of the service commences before the request is sent to the cellular communication service provider (see Haartsen, col.3, lines 24-37).

Regarding claim 12, Haartsen and Kimura further teach a computer system as claimed in claim 10,

Haartsen and Kimura fail to specifically disclose the processor is further arranged for receiving location information representing the location of the communication device, and for determining from the location information one or more wireless hotspots that are within a vicinity of the communication device.

However, Stewart teaches the processor is further arranged for receiving location information representing the location of the user ([0015]), and for determining from the

location information one or more wireless hotspots that are or will be within the range of the user ([0014]-[0015]).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of Stewart to Haartsen and Kimura to provide a system in which a mobile user can be geographically located automatically.

Regarding claim 13, Haartsen and Kimura further teach a computer system as claimed in claim 12, wherein the processor is further arranged for (a) receiving a positive request for use of a service at the hotspot from the user (see Kimura, [0017]), (b) commencing authenticating a provider of the service before the positive request is received (see Gerdes, [0035]) and (c) preparing authentication information for use by the user after the positive request is received (see Gerdes, abstract, [0035]).

Regarding claim 23, Haartsen and Kimura further teach a computer system as claimed in claim 10,

Haartsen and Kimura fail to specifically disclose wherein the computer system is further arranged to receiver the indication of potential use is received via a call over a cellular commutations network from the user via the cellular communications service provider.

However, Stewart teaches the indication of potential use is received via a call over a cellular commutations network from a user via the cellular communications service provider ([0022]).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of Stewart to Haartsen and Kimura to provide a system in which a mobile user can be geographically located automatically.

Regarding claim 25, Haartsen and Kimura further teach a storage medium as claimed in claim 14, further comprising computer- readable program code arranged to cause a computer system of the cellular communications provider to:

Haartsen and Kimura fail to specifically disclose sense a direction the user is moving and alert the user of upcoming wireless computer network hotspots.

However, Stewart teaches sense a direction the user is moving and alert the user of upcoming wireless computer network hotspots (see Stewart, [0023]).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of Stewart to Haartsen and Kimura to provide a system in which a mobile user can be geographically located automatically.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to KHAI M. NGUYEN whose telephone number is (571)272-7923. The examiner can normally be reached on 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vincent P. Harper can be reached on 571.272.7605. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/VINCENT P. HARPER/
Supervisory Patent Examiner, Art Unit 2617

/Khai M Nguyen/
Examiner, Art Unit 2617

7/10/2009